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MEMORANDUM

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TO: Docket Control

FROM: Steven M. Olea
Director
Utilities Division

EA for SMD

AZ CORP COMMISSION
DOCKET CONTROL

DATE: November 6, 2013

RE: STAFF REPORT FOR TONTO VILLAGE WATER COMPANY, INC. DBA
TONTO VILLAGE WATER COMPANY APPLICATION FOR A PERMANENT
RATE INCREASE (DOCKET NO. W-01580A-13-0255)

Attached is the Staff Report for Tonto Village Water Company, Inc. application for a permanent rate increase. Staff recommends approval of the rate increase application using Staff's recommended rates and charges.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before November 18, 2013.

SMO:BCA:tdp\ML

Originator: Brendan C. Aladi

Arizona Corporation Commission

DOCKETED

NOV 06 2013

DOCKETED BY	
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Service List for: Tonto Village Water Company, Inc. dba Tonto Village Water Company
Docket No. W-01580A-13-0255

Mr. Jeff Daniels
Tonto Village Water Company, Inc.
173 S. Blackfoot Road
Payson, Arizona 85541

**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

TONTO VILLAGE WATER COMPANY, INC.

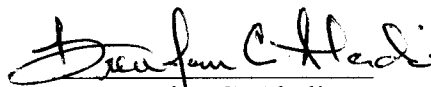
DOCKET NO. W- 01580A-13-0255

**APPLICATION FOR
A PERMANENT RATE INCREASE**

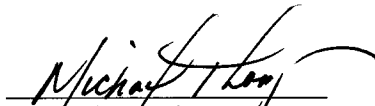
NOVEMBER 6, 2013

STAFF ACKNOWLEDGMENT

The Staff Report for Tonto Village Water Company, Inc., Docket No. W-01580A-13-0255 was the responsibility of the Staff members listed below. Brendan C. Aladi was responsible for the financial review and analysis of the Company's application, recommended revenue requirement, rate base and rate design. Michael Thompson was responsible for the engineering and technical analysis. Deborah Reagan was responsible for reviewing the Commission's records on customer complaints filed with the Commission.



Brendan C. Aladi
Public Utilities Analyst III


Michael Thompson
Utilities Engineer
Deborah Reagan

Public Utilities Consumer Analyst II

EXECUTIVE SUMMARY
TONTO VILLAGE WATER COMPANY, INC.
APPLICATION FOR A PERMANENT RATE INCREASE
DOCKET NO. W-01580A-13-0255

Tonto Village Water Company, Inc. ("Tonto Village" or "Company") filed an application for a permanent rate increase with the Arizona Corporation Commission ("Commission") on July 25, 2013. The application was deemed sufficient on August 23, 2013.

Tonto Village is a class D for-profit S Corporation, operating in Arizona as a public service corporation that provides potable water service to approximately 177 metered customers. The Company is located off State Route 260 approximately thirteen miles northeast of the town of Payson in Gila County, Arizona. The current permanent rates were authorized in Decision No. 68066, dated August 17, 2005.

The Company proposed a \$45,000 or a 130.1 percent increase over the test year revenue of \$34,594 to \$79,594¹. The Company proposed revenue would result in an operating income \$45,034 for an 82.85 percent rate of return on an original cost rate base ("OCRB") of \$54,358. The Company did not propose a fair value rate base that differs from its OCRB. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 951 gallons from \$11.00 to \$22.60, for an increase of \$11.60, or 105.5 percent.

Staff recommends a \$26,196 or a 76.40 percent increase over the Staff adjusted test year revenue of \$34,288 to \$60,484. Staff's recommended revenues would result in an operating income of \$7,629, for a 12.16 rate of return on a Staff adjusted OCRB of \$62,757. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 951 gallons from \$11.00 to \$18.85, for an increase of \$7.85, or 71.4 percent.

STAFF RECOMMENDATIONS

Staff recommends:

1. The approval of its recommended rates and charges as shown in Schedule BCA-4.
2. That the Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
3. That the Company file a rate case within five years of a decision in this case.
4. That the Company be ordered to use the depreciation rates presented in Table C of the attached Engineering Report.

¹Tonto Village proposed rates would actually produce total revenue of \$71,746, resulting in the difference of negative \$7,848 (i.e. \$71,746 - \$79,594).

5. That Tonto Village continues coordinating the readings of their well meters and individual customer meters on a monthly basis and reporting the results in its Commission Annual Reports going forward. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that Tonto Village shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent. If Tonto Village believes it is not cost effective to reduce the water loss to less than 10 percent, Tonto Village should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.
6. That Tonto Village file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>.

A maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

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ATTACHMENT

Engineering Report	A
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Fact sheet

Company:

Type of Ownership: For-Profit S-Corporation.

Tonto Village Water Company, Inc. ("Tonto Village" or "Company") is a class D for-profit Arizona public service corporation that provides potable water service to approximately 177 metered customers.

Rates:

Permanent rate increase application filed: July 25, 2013.

Current test year ended: December 31, 2011.

Prior test year ended: December 31, 2003.

The application became sufficient on August 23, 2013.

	<u>Company Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Monthly Minimum Rates			
Residential Monthly Minimum Charge			
5/8 x 3/4-inch meter	\$ 10.00	\$ 18.80	\$ 16.00
(Gallons included in the minimum)	0	0	0
Commodity Rates (Per 1,000 gallons)			
<u>All Meter Sizes</u>			
0 to 3,000 gallons	\$ 1.50	N/A	N/A
3,001 to 7,000 gallons	\$ 2.15	N/A	N/A
Over 7,000 gallons	\$ 3.50	N/A	N/A
<u>All Meter Sizes</u>			
0 to 2,000 gallons	N/A	\$ 4.00	N/A
2,001 to 8,000 gallons	N/A	\$ 5.00	N/A
Over 8,000 gallons	N/A	\$ 7.00	N/A

All Meter Sizes

0 to 2,000 gallons	\$	N/A	N/A	\$	3.00
2,001 to 7,000 gallons	\$	N/A	N/A	\$	4.25
Over 7,000 gallons	\$	N/A	N/A	\$	5.60

Typical 5/8x3/4 or 3/4-inch residential bill

Average use (2,938 gallons)	\$	13.08	\$	31.49	\$	25.99
Median use (951 gallons)	\$	11.00	\$	22.60	\$	18.85

Customers

Average Number of customers in the current test year (12/31/11): 177
The Company has seasonal customers.

Notifications

Company mailed Customer Notification on July 25, 2013.

Summary of Filing

The test year results as adjusted by Staff ("Staff") for Tonto Village Water Company, Inc. ("Tonto Village" or "Company") show total operating revenue of \$34,288, an operating loss of \$16,915, for no rate of return, as shown on Schedule BCA-1. The Original Cost Rate Base ("OCRB") as adjusted by Staff is \$62,757².

The Company proposed a \$45,000 or a 130.1 percent increase over the test year revenue of \$34,594 to \$79,594³. The Company proposed revenue would result in an operating income \$45,034 for an 82.85 percent rate of return on an original cost rate base ("OCRB") of \$54,358. The Company did not propose a fair value rate base that differs from its OCRB. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 951 gallons from \$11.00 to \$22.60, for an increase of \$11.60, or 105.5 percent.

Staff recommends a \$26,196 or a 76.40 percent increase over the Staff adjusted test year revenue of \$34,288 to \$60,484. Staff's recommended revenues would result in an operating income of \$7,629, for a 12.16 rate of return on Staff adjusted OCRB of \$62,757. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 951 gallons from \$11.00 to \$18.85, for an increase of \$7.85, or 71.4 percent.

² The Company did not propose a fair value rate base that differs from its OCRB.

³Tonto Village proposed rates would actually produce total revenue of \$71,746, resulting in the difference of \$7,848 (ie \$71,746 - \$79,594).

According to the application, the Company requests a rate increase due to increases in operating expenses.

Background

In March 2010, Mr. and Mrs. Daniels acquired Tonto Village by purchasing the shares of common stock of the Company. The Company states that the prior owner did not maintain good records. The new owners just completed organizing the records for 2011, and they are working through the records for 2012. The Company stated that it will create an undue hardship for it to wait till the 2012 information is ready before filing the badly needed rate case. Consequently the Company used a 2011 test year for the rate case.

In the prior rate case for the test year ended December 31, 2003, Tonto Village provided water service to an average of 186 metered customers.

Tonto Village is a class D for-profit, Arizona public service corporation that provides potable water service to approximately 177 metered customers. The Company is located off State Route 260 approximately thirteen miles northeast of the town of Payson in Gila County, Arizona. The current permanent rates were authorized in Decision No. 68066, dated August 17, 2005.

Tonto Village filed an application for a rate increase with the Arizona Corporation Commission ("Commission") on July 25, 2013. On August 23, 2013, Staff issued a Letter of Sufficiency.

Consumer Services

Staff reviewed the Commission's records for the period beginning January 1, 2010, to October 15, 2013, and found the following complaints and opinions filed against the rate increase request:

2013 – Two Complaints – One repair, one quality of service
30 Opinions – 16 Opposed and 14 In favor
2012 – One Complaint – Quality of Service
2011 – One Complaint – Quality of Service
2010 – No Complaints

All complaints have been resolved and are closed.

The Company mailed a Customer Notification on July 25, 2013.

Compliance

The Utilities Division Compliance Section shows no outstanding compliance issues.

Tonto Village is not current on its property tax payment. The Company has made arrangements with Gila County Treasurer to pay the delinquent amount.

The Company submitted a tax clearance application to Arizona Department of Revenue ("ADOR") requesting a certificate of compliance letter of good standing. The Company has not received a response from ADOR.

Tonto Village is in good standing with the Corporations Division of the Commission.

Engineering Analysis and Recommendations

Staff inspected Tonto Village's plant facilities on September 10, 2013. A complete discussion of Staff's technical findings and recommendations and a complete description of the water system are provided in the attached Engineering Report.

Rate Base

Staff's adjustments increased the Company's proposed rate base by \$8,399, from \$54,358 to \$62,757, as shown on Schedule BCA-2, page 1. Details of Staff's adjustments are discussed below.

Plant in Service

Adjustment A increases plant in service by \$366 from \$188,553 to \$188,919, as shown on Schedule BCA-2, pages 1 and 2. These adjustments properly reflect the plant in service account balances per Decision No. 68066 and supported plant.

Electrical Pumping Equipment – Adjustment "a" increases this account by \$207 from \$25,783 to \$25,990, as shown on Schedule BCA-2, pages 2 and 3. Staff increased this account by \$207 to reflect the plant in service account balance per the prior Decision No. 68066 and supported plant.

Transmission and Distribution Mains – Adjustment "b" increases this account by \$159 from \$53,975 to \$54,134, as shown on Schedule BCA-2, pages 2 and 3. Staff increased this account by \$159 to reflect the plant in service account balance per the prior Decision No. 68066 and supported plant.

Other Rate Base Items

Accumulated Depreciation

Accumulated Depreciation - Adjustment B decreases accumulated depreciation by \$3,262 from \$133,058 to \$129,796, as shown on Schedule BCA-2, pages 1 and 4.

Working Capital

Tonto Village did not claim any cash working capital allowance. Staff's adjustments C and D resulted in a net increase to cash working capital of \$4,771, from \$0 to \$4,771, as shown on Schedule BCA-2, pages 1 and 5. Cash working capital was calculated by using the formula method which equals one-eighth of the operating expenses less depreciation, taxes, purchased power and purchased water expenses plus one twenty-fourth of purchased power and purchased water expenses.

Operating Income Statement

Operating Revenue

Staff's adjustment to total operating revenue resulted in a net decrease of \$306, from \$34,594 to \$34,288, as shown on Schedule BCA-3, page 1. Details of Staff's adjustments are discussed below.

Metered Water Revenue – Adjustment A decreases metered water revenue by \$306, from \$34,009 to \$33,703, as shown on Schedule BCA-3, page 1 and 2. Staff's adjustment reflects Staff's calculation of the metered water revenue using the billing determinants provided by the Company.

Operating Expenses

Staff's adjustments to operating expenses resulted in a net increase of \$16,641, from \$34,562 to \$51,203, as shown on Schedule BCA-3, page 1. Details of Staff's adjustments are presented below.

Salaries and Wages Expense – Adjustment B increases salaries and wages expense by \$12,600, from \$13,662 to \$26,262, as shown on Schedule BCA-3, pages 1 and 2. The \$12,600 (70 hours/month at \$15/hour times 12 months) increase reflects the Company's proposed hiring of a part-time repair person to assist in maintaining the water system. The owners are currently absorbing all the cost of repairs and maintenance and are not taking reasonable compensation.

Chemicals - Adjustment C increases Chemical expense by \$65, from \$0 to \$65, as shown on Schedule BCA-3, pages 1 and 2. This adjustment reflects the Company's actual chemical expense.

Water Testing Expense – Adjustment D increases water testing expense by \$850, from \$936 to \$1,786, as shown on Schedule BCA-3, pages 1 and 2. This adjustment reflects the annual water testing costs determined in the attached Engineering Report.

Rate Case Expense – Adjustment E increases rate case expense by \$437, from \$63 to \$500, as shown on Schedule BCA-3, pages 1 and 2. This adjustment reflects a reasonable normalized amount of rate case expense based on a three year normalization period.

Depreciation Expense – Adjustment F increases depreciation expense by \$2,403, from \$5,287 to \$7,690, as shown on Schedule BCA-3, pages 1 and 3. Staff's depreciation expense reflects application of Staff's recommended depreciation rates to Staff's recommended plant balances.

Property Tax Expense – Adjustment E increases property tax expense by \$286, from \$1,887 to \$2,173 as shown on Schedule BCA-3, pages 1 and 4. Staff calculated its property tax amount using a modified version of the Arizona Department of Revenue's ("ADOR") property tax method. The Company is delinquent on the payment of its property taxes for the 2011 and 2012 tax years. However, it has made arrangements with Gila County, Treasurer to pay the delinquent amount (\$4,439.30).

REVENUE REQUIREMENT

Staff recommends total revenue of \$60,484, an increase of \$26,196, or 76.40 percent, over Staff-adjusted test year revenue of \$34,288. Staff's recommended revenue provides a 12.16 percent rate of return on the Staff recommended OCRB of \$62,757 as shown on Schedule BCA-1. Staff's recommended rates and charges would provide an operating income of \$7,629 and would yield a cash flow of \$15,319 and an operating margin of 12.61 percent.

The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 951 gallons from \$11.00 to \$22.60, for an increase of \$11.60, or 105.5 percent.

Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 951 gallons from \$11.00 to \$18.85, for an increase of \$7.85, or 71.4 percent.

Staff's total revenue requirement of \$60,484, provides the Company with sufficient cash flow to pay operating expenses and contingencies.

Rate Design

Schedule BCA-4 presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

Miscellaneous Service Charges

Staff recommends the elimination of both the \$40.00 Establishment (after hours) tariff and the \$40.00 Reconnection (delinquent after hours) tariff. Staff agrees with the Company that an after hour service charge is appropriate when it is at the customer's request or for the customer's convenience. Such a charge compensates the utility for additional expenses incurred when providing after-hours service. Staff recommends the addition of a Service Charge (after hours) tariff in the amount of \$35.00 and that this charge be in addition to the charge for any utility service provided after hours at the customer's request or for the customer's convenience.

Reconnection (Delinquent) Charge – The Company proposes to increase the reconnection (delinquent) service charge from \$25.00 to \$50.00. The current \$25.00 charge is within the range of reconnection charges for similar companies. Staff recommends denial.

Late Fee – The Company proposes to change the late fee charge from 1.50% to \$5.00. Staff recommends that the Company's proposed \$5 late fee be approved.

Service Line and Meter Installation Charges

The Company has requested changes to its service line and meter installation charges as shown on Schedule BCA-4.

Staff has recommended service line and meter installation charges based upon an analysis of costs as discussed in the attached Engineering Report. Staff recommends approval of Staff's service line and meter installation charges as shown on Schedule BCA-4.

STAFF RECOMMENDATIONS

Staff recommends:

1. The approval of its recommended rates and charges as shown in Schedule BCA-4.
2. That the Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
3. That the Company file a rate case within five years of a decision in this case.

4. That the Company be ordered to use the depreciation rates presented in Table C of the attached Engineering Report.
5. That Tonto Village continues coordinating the readings of their well meters and individual customer meters on a monthly basis and reporting the results in its Commission Annual Reports going forward. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that Tonto Village shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent. If Tonto Village believes it is not cost effective to reduce the water loss to less than 10 percent, Tonto Village should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.
6. That Tonto Village file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>.

A maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

Tonto Village Water Company, Inc.
Docket No. W-01580A-13-0255
Test Year Ended: December 31, 2011

Schedule BCA-1

SUMMARY OF FILING

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$34,009	\$33,703	\$79,010	\$59,900
Unmetered Water Revenue	0	0	0	0
Other Water Revenues	584	584	584	584
Total Operating Revenue	\$34,594	\$34,288	\$79,594	\$60,484
Operating Expenses:				
Operation and Maintenance	\$27,196	\$41,148	\$27,195	\$41,148
Depreciation	5,287	7,690	5,287	7,690
Property & Other Taxes	2,079	2,365	2,079	2,919
Income Tax	0	0	0	1,099
Total Operating Expense	\$34,562	\$51,203	\$34,561	\$52,855
Operating Income/(Loss)	\$32	(\$16,915)	\$45,034	\$7,629
Rate Base O.C.L.D.	\$54,358	\$62,757	\$54,358	\$62,757
Rate of Return - O.C.L.D.	0.06%	N/M	82.85%	12.16%
Operating Margin	0.09%	N/M	56.58%	12.61%
Cash Flow	\$5,319	-\$9,225	\$50,321	\$15,319

RATE BASE

	----- Original Cost -----		
	Company	Adjustment	Staff
Plant in Service	\$ 188,553	\$366 A	\$ 188,919
Less:			
Accum. Depreciation	133,058	(3,262) B	129,796
Net Plant	\$ 55,495	\$ 3,628	\$ 59,123
Less:			
Plant Advances	950	0	950
Service Line and Meter Advances	187	0	187
Total Advances	1,137	0	1,137
Contributions Gross	-	0	-
Less:			
Amortization of CIAC	0	-	-
Net CIAC	-	-	-
Total Deductions	\$ 1,137	\$ -	\$ 1,137
Plus:			
1/24 Power	0	\$186 C	\$186
1/8 Operation & Maint.	0	4,585 D	4,585
Inventory	0	0	0
Prepayments	0	0	0
Total Additions	\$ -	\$ 4,771	\$ 4,771
Rate Base	\$ 54,358	\$ 8,399	\$ 62,757

Explanation of Adjustment:

- A - Refer to Schedule BCA-2, Page 2
- B - Refer to Schedule BCA-2, Page 3
- C - Refer to Schedule BCA-2, Page 4
- D - Refer to Schedule BCA-2, Page 4

PLANT ADJUSTMENTS

	Company Exhibit	Adjustment	Staff Adjusted
301 Intangibles/Organization	\$0	\$0	\$0
302 Franchises	0	0	0
303 Land & Land Rights	3,466	0	3,466
304 Structures & Improvements	3,934	0	3,934
307 Wells & Springs	43,648	0	43,648
311 Electrical Pumping Equipment	25,783	207 a	25,990
320.1 Water Treatment Plant	2,780	0	2,780
320.2 Solution Chemical Feeders	3,231	0	3,231
330 Distribution Reservoirs & Standpipes	0	0	0
330.1 Storage Tank	26,431	0	26,431
330.2 Pressure Tank	0	0	0
331 Transmission & Distribution Mains	53,975	159 b	54,134
333 Services	0	0	0
334 Meters & Meter Installations	9,763	0	9,763
335 Hydrants	0	0	0
336 Backflow Prevention Devices	0	0	0
339 Other Plant and Misc. Equipment	13,371	0	13,371
340 Office Furniture & Equipment	2,079	0	2,079
341 Transportation Equipment	0	0	0
343 Tools Shop & Garage Equipment	0	0	0
344 Laboratory Equipment	0	0	0
345 Power Operated Equipment	92	0	92
346 Communication Equipment	0	0	0
347 Miscellaneous Equipment	0	0	0
348 Other Tangible Plant	0	0	0
105 C.W.I.P.	0	0	0
TOTALS	\$188,553	\$366 A	\$188,919

STAFF ADJUSTMENTS

a -	ELECTRICAL AND PUMPING EQUIPMENT - Per Company	\$25,783	
	Per Staff	<u>25,990</u>	<u>\$207</u>

To properly reflect account balance per Decision No. 68066
and supported plant.

b -	TRANSMISSION AND DISTRIBUTION MAINS - Per Company	\$53,975	
	Per Staff	<u>54,134</u>	<u>\$159</u>

To properly reflect account balance per Decision No. 68066
and supported plant.

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
Accumulated Depreciation - Per Company	\$ 133,058
Accumulated Depreciation - Per Staff	<u>129,796</u>
Total Adjustment	B <u>(\$3,262)</u>

ACCT		ACCUMULATED DEPRECIATION		
<u>No.</u>	<u>Description</u>	Company	Staff	Staff
		<u>Application</u>	<u>Adjustment</u>	<u>Calculated</u>
301	Organization	\$ -	\$ -	\$ -
302	Franchise	\$ -	\$ -	\$ -
303	Land and Land Rights	-	-	-
304	Structures and Improvements	3,397	(14)	3,383
307	Wells and Springs	15,861	(572)	15,289
311	Electrical Pumping Equipment	19,976	(906)	19,070
320.1	Water Treatment Plant	2,732	(3)	2,729
320.2	Solution Chemical Feeders	3,364	(1,985)	1,379
330	Distribution Reservoirs & Standpipes	-	-	-
330.1	Storage Tank	26,431	-	26,431
330.2	Pressure Tank	-	-	-
331	Transmission and Distribution Mains	46,439	(79)	46,360
333	Services	-	-	-
334	Meters and Meter Installation	9,763	-	9,763
335	Hydrants	-	-	-
339	Other Plant and Miscellaneous Equipment	3,001	(446)	2,555
340	Office Furniture and Fixtures	2,079	746	2,825
340.1	Computers and Software	-	-	-
341	Transportation Equipment	-	-	-
343	Tools and Work Equipment	-	-	-
345	Power Operated Equipment	15	(3)	12
346	Communications Equipment	-	-	-
348	Other Tangible Plant	-	-	-
	Total	\$ 133,058	(3,262)	\$ 129,796

STAFF PLANT ADJUSTMENTS

C -	WORKING CAPITAL (1/24 Purchased Pwr & Wtr) Per Company	\$0	
	Per Staff	\$186	\$ 186

To reflect Staff's calculation of cash working capital based on Staff's recommendations for purchased power and purchase water.

D -	WORKING CAPITAL (1/8 operation & Maint exp.) Per Company	\$0	
	Per Staff	4,585	\$ 4,585

To reflect Staff's calculation of cash working capital based on Staff's recommendations for operation and maintenance expense (excluding purchased power and purchased water expenses).

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$34,009	(\$306) A	\$33,703
460 Unmetered Water Revenue	0	0	0
474 Other Water Revenues	584	0	584
Total Operating Revenue	\$34,594	(\$306)	\$34,288
Operating Expenses:			
601 Salaries and Wages	\$13,662	\$12,600 B	\$26,262
610 Purchased Water	0	0	0
615 Purchased Power	4,464	0	4,464
618 Chemicals	0	65 C	65
620 Repairs and Maintenance	1,980	0	1,980
621 Office Supplies & Expense	1,089	0	1,089
630 Outside Services	572	0	572
635 Water Testing	936	850 D	1,786
641 Rents	0	0	0
650 Transportation Expenses	4,224	0	4,224
657 Insurance - General Liability	0	0	0
665 Regulatory Commission Expense	0	0	0
666 Regulatory Commission Expense - Rate Case	63	437 E	500
675 Miscellaneous Expense	206	0	206
403 Depreciation Expense	5,287	2,403 F	7,690
408 Taxes Other Than Income	192	0	192
408.11 Property Taxes	1,887	286 G	2,173
409 Income Tax	0	0	0
Total Operating Expenses	\$34,562	\$16,641	\$51,203
OPERATING INCOME/(LOSS)	\$32	(\$16,947)	(\$16,915)

STAFF ADJUSTMENTS

A -	METERED WATER REVENUE - Per Company	\$34,009	
	Per Staff	33,703	(\$306)

To reflect the metered water revenue per the Company's submitted bill count.

B -	SALARIES AND WAGES - Per Company	\$13,662	
	Per Staff	26,262	\$12,600

To reflect proposed salaries and wages for a part time employee.

C -	CHEMICALS - Per Company	\$0	
	Per Staff	65	\$65

To reflect the Company's actual chemical expense.

D -	WATER TESTING - Per Company	\$936	
	Per Staff	1,786	\$850

To reflect annual water testing expense, per Staff Engineering Report.

E -	REGULATORY COMMISSION EXPENSE (Rate Case) - Per Company	\$63	
	Per Staff	500	\$437

To reflect a reasonable normalized amount of rate case expense based on three years between rate cases.

\$	1,500	Rate Case Expense
	3	Divided by 3 years
\$	500	Annual Rate Case Expense

STAFF ADJUSTMENTS (Cont.)

E - DEPRECIATION - Per Company \$5,287
Per Staff 7,690 \$2,403

To reflect application of Staff's recommended depreciation rates to
Staff's recommended plant, by account.

Pro Forma Annual Depreciation Expense:

Operating Income Adjustment E - Test Year Depreciation Expense

LINE NO.	DESCRIPTION	[A] Plant In Service Per Staff	[B] NonDepreciable or Fully Depreciated Plant	[C] Depreciable Plant (Col A - Col B)	[D] Depreciation Rate	[E] Depreciation Expense (Col C x Col D)
1	301 - Organization Cost	\$ -	\$ -	-	0.00%	-
2	302 - Franchise Cost	\$ -	\$ -	-	0.00%	-
3	303 - Land and Land Rights	3,466	3,466	-	0.00%	-
4	304 - Structures and Improvements	\$3,934	-	\$ 3,934	3.33%	131
5	305 - Collecting and Impounding Res.	-	-	-	2.50%	-
6	306 - Lake River and Other Intakes	-	-	-	2.50%	-
7	307 - Wells & Spring	43,648	-	43,648	3.33%	1,453
8	308 - Infiltration Galleries and Tunnels	-	-	-	6.67%	-
9	309 - Supply Main	-	-	-	2.00%	-
10	310 - Power Generation Equip.	-	-	-	5.00%	-
11	311 - Electric Pumping Equipment	25,990	-	25,990	12.50%	3,249
12	320 - Water Treatment Equipment	-	-	-	-	-
13	320.1 Water Treatment Plants	2,780	-	2,780	3.33%	93
14	320.2 Solution Chemical Feeders	3,231	-	3,231	20.00%	646
15	330 - Distribution Resrvr & Standpipe	-	-	-	-	-
16	330.1 Storage Tanks	26,431	26,431	-	2.22%	-
17	330.2 Pressure Tanks	-	-	-	5.00%	-
18	331 - Transmission & Distr. Mains	54,134	-	54,134	2.00%	1,083
19	333 - Services	-	-	-	3.33%	-
20	334 - Meter & Meter Installations	9,763	9,763	-	8.33%	-
21	335 - Hydrants	-	-	-	2.00%	-
22	336 - Backflow Prevention Devices	-	-	-	6.67%	-
23	339 - Other Plant & Misc Equipment	13,371	-	13,371	6.67%	892
24	340 - Office Furniture and Fixtures	2,079	-	2,079	6.67%	139
25	340.1 Computers and Softwares	-	-	-	20.00%	-
26	341 - Transportation Equipment	-	-	-	20.00%	-
27	343 - Tools & Work Equipment	-	-	-	5.00%	-
28	345 - Power Operated Equipment	92.00	-	92	5.00%	5
29	346 - Communication Equipment	-	-	-	10.00%	-
30	347 - Miscellaneous Equipment	-	-	-	10.00%	-
31	348 - Other Tangible Plant	-	-	-	-	-
32	Total Plant	\$ 188,919	\$ 39,660	\$ 149,259		\$ 7,690
33						
34	Composite Depreciation Rate (Depr Exp / Depreciable Plant):					5.15%
35	CIAC:					\$ -
36	Amortization of CIAC (Line 34 x Line 35):					\$ -
37						
38	Pro Forma Annual Depreciation Expense					
39						
40	Plant in Service					\$ 188,919
41	Less: Non Depreciable Plant					\$ 3,466
42	Fully Depreciable Plant					36,194
43	Depreciable Plant					\$149,259
44	Times: Staff Proposed Depreciation Rate					5.15%
45	Depreciation Expense Before Amortization of CIAC:					\$ 7,690
46	Less Amortization of CIAC:					\$ -
47	Test Year Depreciation Expense - Staff:					\$ 7,690
48	Depreciation Expense - Company:					\$ 5,287
49	Staff's Total Adjustment:					\$ 2,403

OPERATING INCOME ADJUSTMENT F - PROPERTY TAXES

		[A]		[B]	
LINE NO.	Property Tax Calculation	STAFF AS ADJUSTED		STAFF RECOMMENDED	
1	Staff Adjusted Test Year Revenues - 2012	\$	34,288	\$	34,288
2	Weight Factor		2		2
3	Subtotal (Line 1 * Line 2)	\$	68,576	\$	68,576
4	Staff Recommended Revenue, Per Schedule BCA-1		34,288		60,484
5	Subtotal (Line 4 + Line 5)	\$	102,864	\$	129,060
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)	\$	34,288	\$	43,020
8	Department of Revenue Multiplier		2		2
9	Revenue Base Value (Line 7 * Line 8)	\$	68,576	\$	86,040
10	Plus: 10% of CWIP -		-		-
11	Less: Net Book Value of Licensed Vehicles		-		-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$	68,576	\$	86,040
13	Assessment Ratio		22.5%		22.5%
14	Assessment Value (Line 12 * Line 13)		15,430	\$	19,359
15	Composite Property Tax Rate (Obtained from Pima County)		14.085%		14.085%
16	Staff Proposed Property Tax Expense (Line 14 * Line 15)	\$	2,173		
17	Company Proposed Property Tax		1,887		
18	Staff Test Year Adjustment (Line 16-Line 17)	\$	286		
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	2,727
20	Staff Test Year Adjusted Property Tax Expense (Line 16)			\$	2,173
21	Increase/(Decrease) to Property Tax Expense			\$	553
22	Decrease to Property Tax Expense			\$	553
23	Increase in Revenue Requirement				26,197
24	Decrease to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)				2.11%
F -	PROPERTY TAXES - Per Company		1,887		
	Per Staff	\$	2,173		286

To reflect property tax expense using the Arizona Department of Revenue property method.

Calculation of Income Tax Allowance

<u>Calculation of Income Tax:</u>		Corporate Tax Calculation		Married Filing Jointly Personal Tax Calculation	
1	Revenue (Schedule BCA-1)	\$	60,484	\$	60,484
2	Operating Expenses Excluding Income Taxes	\$	51,756	\$	51,756
3	Less: Synchronized Interest (L3)	\$	-	\$	-
4	Arizona Taxable Income (L1 - L2- L3)	\$	8,728	\$	8,728
5	Arizona State Income Tax Rate		6.97%		2.59%
6	Arizona Income Tax (L4 x L5)		\$ 608		\$ 226
7	Federal Taxable Income (L42 - L44)	\$	8,120	\$	8,728
8	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$	1,218		10%
9	Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%				
10	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%				
11	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%				
12	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%				
13	Total Federal Income Tax	\$	1,218	\$	873
14	Combined Federal and State Income Tax (L35 + L42)	\$	-	\$	1,099

RATE DESIGN

Monthly Usage Charge	Current Rates	Company Proposed	Staff Recommended
5/8" x 3/4" Meter	\$10.00	\$18.80	\$ 16.00
3/4" Meter	12.00	33.56	16.00
1" Meter	20.00	63.39	40.00
1½" Meter	40.00	105.26	80.00
2" Meter	65.00	167.96	128.00
3" Meter	120.00	301.59	256.00
4" Meter	200.00	499.98	400.00
6" Meter	\$400.00	\$ 999.75	\$ 800.00

Gallons in Minimum	0	0	0
--------------------	---	---	---

Commodity Rates (Per 1,000 gallons)

All Meter Sizes

First Tier - 0 - 3,000 gallons	\$ 1.50	N/A	N/A
Second Tier - 3,001 to 7,000 gallons	2.15	N/A	N/A
Third Tier - Over 7,000 gallons	3.50	N/A	N/A

All Meter Sizes

First Tier - 0 - 2,000 gallons	N/A	\$ 4.00	N/A
Second Tier - 2,001 to 8,000 gallons	N/A	\$ 5.00	N/A
Third Tier - Over 8,000 gallons	N/A	\$ 7.00	N/A

All Meter Sizes

First Tier - 0 - 2,000 gallons	N/A	N/A	\$ 3.00
Second Tier - 2,001 - 7,000 gallons	N/A	N/A	\$ 4.25
Third Tier - Over 7,000 gallons	N/A	N/A	\$ 5.60

Service Line and Meter Installation Charges	Company		Staff Recommended		
	Current Charge	Proposed Total Charge	Service Line Charge	Meter Charge	Total Charges
5/8" x 3/4" Meter	\$ 375	\$ 910	\$ 445	\$ 465	\$ 910
3/4" Meter	425	1,010	445	565	1,010
1" Meter	500	1,200	495	315	810
1½" Meter	675	1,400	550	525	1,075
2" Meter Turbine	900	1,875	830	\$ 1,045	\$ 1,875
3" Meter Turbine	1,300	2,715	-	-	ICB
4" Meter Turbine	\$ 1,800	\$ 4,160	-	-	ICB
6" Meter Turbine	N/A	N/A	-	-	N/A

ICB = Individual Case Basis

Service Charges

Establishment	\$ 25.00	\$ 30.00	\$ 25.00
Reconnection (Delinquent)	\$ 25.00	\$ 50.00	\$ 25.00
Meter Test (If Correct)	\$ 25.00	\$ 25.00	\$ 25.00
Deposit	*	*	*
Deposit Interest Per Annum	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	\$ 25.00	\$ 25.00	\$ 25.00
Deferred Payment - Per Month	N/A	1.50%	1.50%
Meter Re-Read (If Correct)	\$ 15.00	\$ 15.00	\$ 10.00
Late Payment Charge	1.50%	\$ 5.00	\$ 5.00
Service Charge (After Hours)	\$ 40.00	\$ 60.00	\$ 35.00

Monthly Service Charge for Fire Sprinkler

4" or Smaller	\$0.00	\$0.00	***
6"	0.00	0.00	***
8"	0.00	0.00	***
10"	0.00	0.00	***
Larger than 10"	0.00	0.00	***

* Per Commission rule A.A.C. R-2-403(B)

** Number of months off system times the monthly minimum A.A.C. R14-2-403(D).

*** 2.00% of monthly minimum for a comparable size meter connection but no less than \$10.00 per month. The service charge for fire sprinklers is only applicable for service lines separate and distinct from the primary water service line.

Tonto Village Water Company, Inc.
Docket No. W-01580A-13-0255
Test Year Ended: December 31, 2011

Schedule BCA-5

TYPICAL BILL ANALYSIS

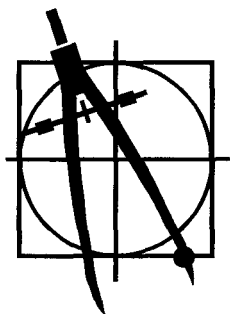
5/8 x 3/4 - Inch Meter

Average Number of Customers: 177

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	2,938	\$13.08	\$31.49	\$18.40	140.7%
Median Usage	951	\$11.00	\$22.60	\$11.60	105.5%
<u>Staff Recommended</u>					
Average Usage	2,938	\$13.08	\$25.99	\$12.90	98.6%
Median Usage	951	\$11.00	\$18.85	\$7.85	71.4%

Present & Proposed Rates (Without Taxes) 5/8 x 3/4 - Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$10.00	\$18.80	88.0%	\$16.00	60.0%
1,000	11.05	22.80	106.3%	19.00	71.9%
2,000	12.10	26.80	121.5%	22.00	81.8%
3,000	13.15	31.80	141.8%	26.25	99.6%
4,000	15.30	36.80	140.5%	30.50	99.3%
5,000	17.45	41.80	139.5%	34.75	99.1%
6,000	19.60	46.80	138.8%	39.00	99.0%
7,000	21.75	51.80	138.2%	43.25	98.9%
8,000	25.25	56.80	125.0%	48.85	93.5%
9,000	28.75	63.80	121.9%	54.45	89.4%
10,000	32.25	70.80	119.5%	60.05	86.2%
15,000	49.75	105.80	112.7%	88.05	77.0%
20,000	67.25	140.80	109.4%	116.05	72.6%
25,000	84.75	175.80	107.4%	144.05	70.0%
50,000	172.25	350.80	103.7%	284.05	64.9%
75,000	259.75	525.80	102.4%	424.05	63.3%
100,000	347.25	700.80	101.8%	564.05	62.4%
125,000	434.75	875.80	101.4%	704.05	61.9%
150,000	522.25	1,050.80	101.2%	844.05	61.6%
175,000	609.75	1,225.80	101.0%	984.05	61.4%
200,000	697.25	1,400.80	100.9%	1,124.05	61.2%



**ENGINEERING REPORT FOR
Tonto Village Water Company, Inc.**

**Docket No.
W-01580A-13-0255 (Rates)**

By Michael Thompson

October 4, 2013

CONCLUSIONS

1. The Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff ("Utilities Staff" or "Staff") concludes that the Tonto Village Water Company, Inc. ("TVWC" or "Company") water system has adequate production and storage capacity to serve the present customer base and any reasonable growth.
2. The Arizona Department of Environmental Quality ("ADEQ") has reported that TVWC is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.
3. The Arizona Department of Water Resources ("ADWR") has reported that TVWC is currently in compliance with departmental requirements governing water providers and/or community water systems. TVWC's service area is not located within an ADWR Active Management Area ("AMA").
4. According to the Utilities Division Compliance Section database TVWC currently has no delinquent Commission compliance items.
5. TVWC has approved Curtailment and Backflow Tariffs on file with the Commission.
6. During Staff's field inspection, Well #2A was determined not to be used and useful.

RECOMMENDATIONS

1. Staff recommends an annual water testing expense of \$1,786 presented in Table B be used for purposes of this application (See Page 8, Section E ADEQ Compliance).
2. Staff recommends that TVWC continue to use the depreciation rates presented in Table C (See Page 10, Section H Depreciation Rates).

3. Staff recommends that the meter and installation charges listed under "Staff's Recommendation" in Table D be adopted (See Page 11, Section I Other Issues).
4. Staff recommends that TVWC continue coordinating the readings of their well meters and individual customer meters on a monthly basis and reporting the results in its Commission Annual Reports going forward¹. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that TVWC shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent. If TVWC believes it is not cost effective to reduce the water loss to less than 10 percent, TVWC should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.
5. Staff recommends that TVWC file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>.

Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

¹ TVWC shall collect the data needed to accurately complete the water use data sheets contained in the Annual Report form.

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A. INTRODUCTION AND LOCATION OF COMPANY

On July 25, 2013, Tonto Village Water Company, Inc. ("TVWC" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") to increase its rates (Docket No. W-01580A-13-0255). The Company's current rates were approved in Commission Decision No. 68066, dated August 17, 2005. The ACC Utilities Division Staff ("Utilities Staff" or "Staff") engineering review and analysis of the pending rate application is presented in this report.

TVWC is a Class D water utility company that provides public utility water service to 182 metered connections.² The TVWC water system serves Tonto Village 1, 2 & 3, a small three (3) phase subdivided community, which is located off State Route 260 approximately 13 miles northeast of the town of Payson in Gila County, Arizona. The location of TVWC, and the area covered by its Certificate of Convenience and Necessity ("CC&N"), which covers approximately 81 acres, are shown in Figures 1 and 2, respectively. The CC&N was granted in Commission Decision No. 30786 dated March 10, 1958.

B. DESCRIPTION OF THE WATER SYSTEM

The Tonto Village water system was visited on September 10, 2013, by Staff member Michael Thompson. Mr. Thompson was accompanied by Mr. Jeff Daniels and Mrs. Dianne Daniels. Mr. Daniels currently handles the day-to-day operations of the water system, and is also the certified operator.³ Mrs. Daniels handles the accounting and billing for TVWC.⁴ The in-service plants (i.e. wells, tanks, pumps, and visible pipe) appeared to be in proper working order. The plant sites were in reasonably good condition. However, the plant sites were in need of general upkeep and landscaping care. Staff did not observe any leaks at the well sites or in the distribution system.

TVWC has two well sites identified as Well Site #2 and #3. Well Site #2 consists of two (2) wells (2A & 2B), a 34,000 gallon storage tank, a 2,000 gallon hydro-pneumatic pressure tank, two (2) 5 horsepower ("hp") booster pumps, and a chlorination system. Well Site #3 consists of one (1) well, a 10,000 gallon storage tank, a 1,000 gallon hydro-pneumatic pressure tank, two (2) 2 hp booster pumps, and a chlorination system. Both well sites are located in Tonto Village 3, the third phase of the subdivision. Well Site #2 is located on a small lot (Tract A) at the corner of Standage Drive and Tonto Trail. Well Site #3 is located on Lot 224, north of Well Site #2, off of Standage Drive.

² Per plant data submitted with the application.

³ Mr. Daniels is a Certified Grade 2 Water Distribution System Operator, and a Grade 2 Treatment Plant Operator, ADEQ Operator Identification No. OP025081.

⁴ TVWC was purchased by Jeff and Dianne Daniels in April 2010.

The TVWC distribution system consists of 5,500 linear feet ("lf") of 2-inch, 2,270 lf of 3-inch, 1,710 lf of 4-inch, and 5,395 lf water main pipe which currently serve 182 metered connections.⁵ There are no fire hydrants within the distribution system.

Currently, well #2A & #3 are out of service. Well #2A has ceased to function due to a collapsed well casing. Well #3 is temporarily out of service due to a faulty flow meter. TVWC is in the process of replacing the flow meter and will be bringing the well back in service within a few weeks. Well #2B yields approximately 75 gallons per minute ("gpm"), and is currently producing water for the entire water system (Tonto Village 1, 2, & 3). The well feeds chlorinated water to an on-site 34,000 gallon storage tank. Water level in the storage tank is controlled by high and low water level transmitters located within the tank. From the storage tank, the disinfected water is pressurized and delivered to the distribution system through a booster system consisting of two (2) 5 hp booster pumps, and a 2,000 gallon pressure tank. Well #3, when in service, yields approximately 24 gpm. The well feeds chlorinated water to an on-site 10,000 gallon storage tank. Water level in the storage tank is controlled by high and low water level transmitters located within the tank. From the storage tank, the disinfected water is pressurized and delivered to the distribution system through a booster system consisting of two (2) 2 hp booster pumps, and a 1,000 gallon pressure tank. When brought back into service, Well #3 will serve Tonto Village 3. Well #2B will serve Tonto Village 1 & 2.

A schematic of the water system is illustrated in Figure 3, and a detailed listing of the plant facilities is included in Table A.

Table A. Plant Facilities Summary⁶

Well Data

	Well #2A (Inactive)	Well #2B	Well #3
ADWR Registration No.	55-2627910	55-218159	55-516995
Location	Well Site #2	Well Site #2	Well Site #3
Casing Diameter (inches)	6	8	6
Casing Depth (feet)	80	600	340
Pump Horsepower (hp)	Unknown	7.5	2
Pump Yield (gpm)	<35	75	24
Meter Size (inches)	1	2	1
Year Drilled	1971	2008	1987

⁵ Customer meter count based on discussions with the TVWC representative at the time of Staff's inspection. The TVWC representative indicated that approximately 95 percent of the connections serve permanent residents, and approximately 5 percent of the connections serve part-time residents. The distribution system water main pipe consists of a combination of asbestos concrete ("ABC"), and polyvinyl chloride ("PVC") pipe.

⁶ The information listed was based on one, or a combination of, the following sources: 1) Company's Application, 2) Commission Annual Reports, 3) Arizona Department of Water Resources Records, 4) Information contained in the Company's Response to a Staff Data Requests and, 5) Information collected during Staff's site visit.

Water Storage, Booster Systems, & Structures

Structure or Equipment	Location	Quantity – Capacity, Size
Storage Tank	Well Site #2	1 – 34,000 Gallons
Pressure Tank	Well Site #2	1 – 2,000 Gallons
Booster Pumps	Well Site #2	2 – 5 hp Single Speed
Chlorination System	Well Site #2	1 – Chlorine Pump & Tank
Security Fence	Well Site #2 Enclosed	6 Foot Chain Link*
Storage Tank	Well Site #3	1 – 10,000 Gallons
Pressure Tank	Well Site #3	1 – 1,000 Gallons
Booster Pumps	Well Site #3	2 – 2 hp
Chlorination System	Well Site #3	1 – Chlorine Pump & Tank
Security Fencing	Well Site #3 Enclosed	1 – 6 Foot Chain Link*

*Security fences are not equipped with security wire.

Distribution Mains

Diameter (inches)	Material	Length (feet)
2	ABC & PVC*	5,500
2	PVC	90
4	ABC & PVC*	2,270
6	ABC & PVC*	1,710

Notes: 1) ABC is asbestos-cement pipe used in water distribution systems and in general construction.
 2) PVC is poly vinyl chloride pipe used in water distribution systems and in general construction.
 * Indicates that piping in distribution system consists of a combination of ABC and PVC.

Meters

Size	Quantity
5/8 x 3/4 inch	182

Fire Hydrants

Size/Description	Quantity
Standard	0

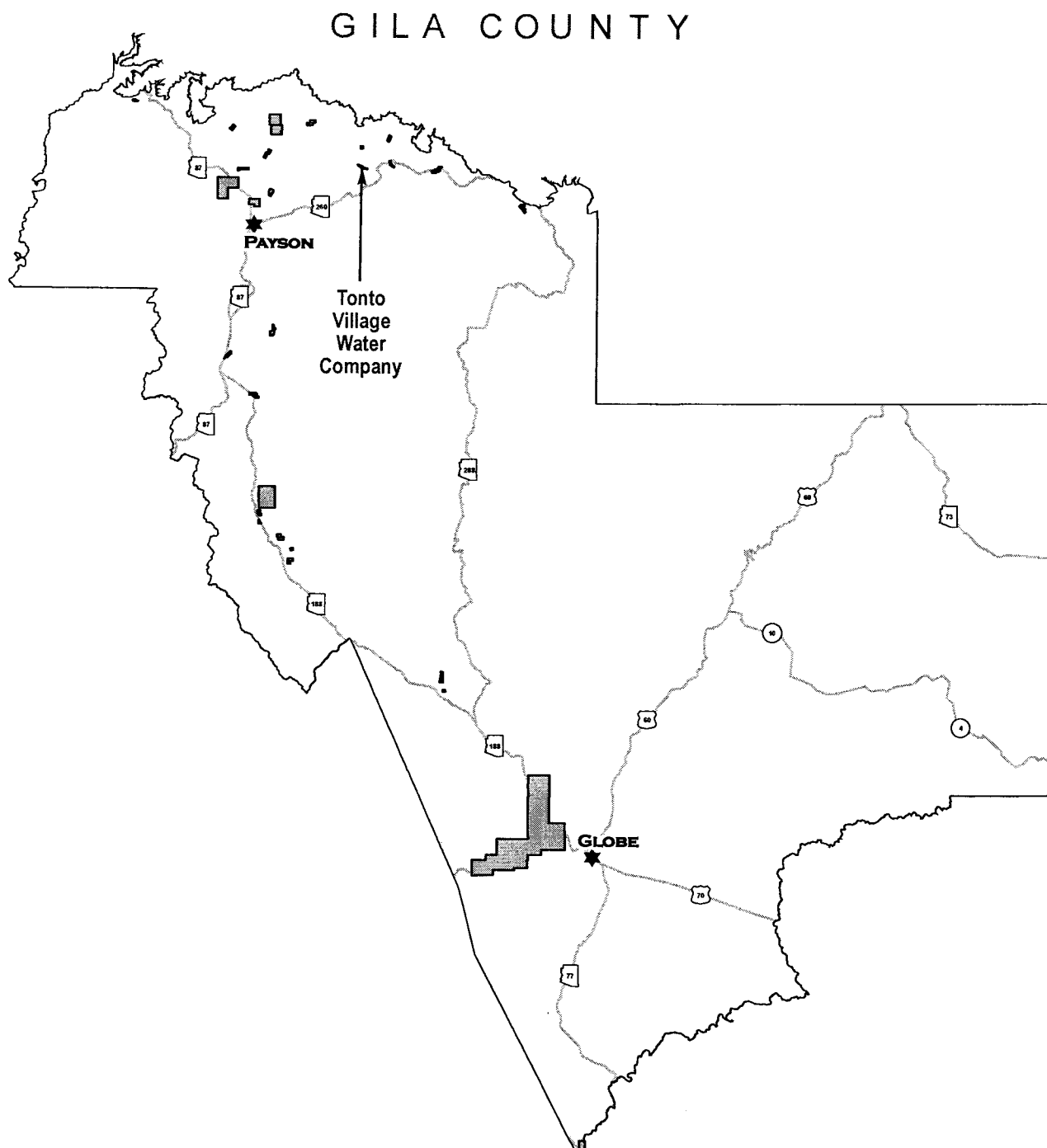


Figure 1. County Map

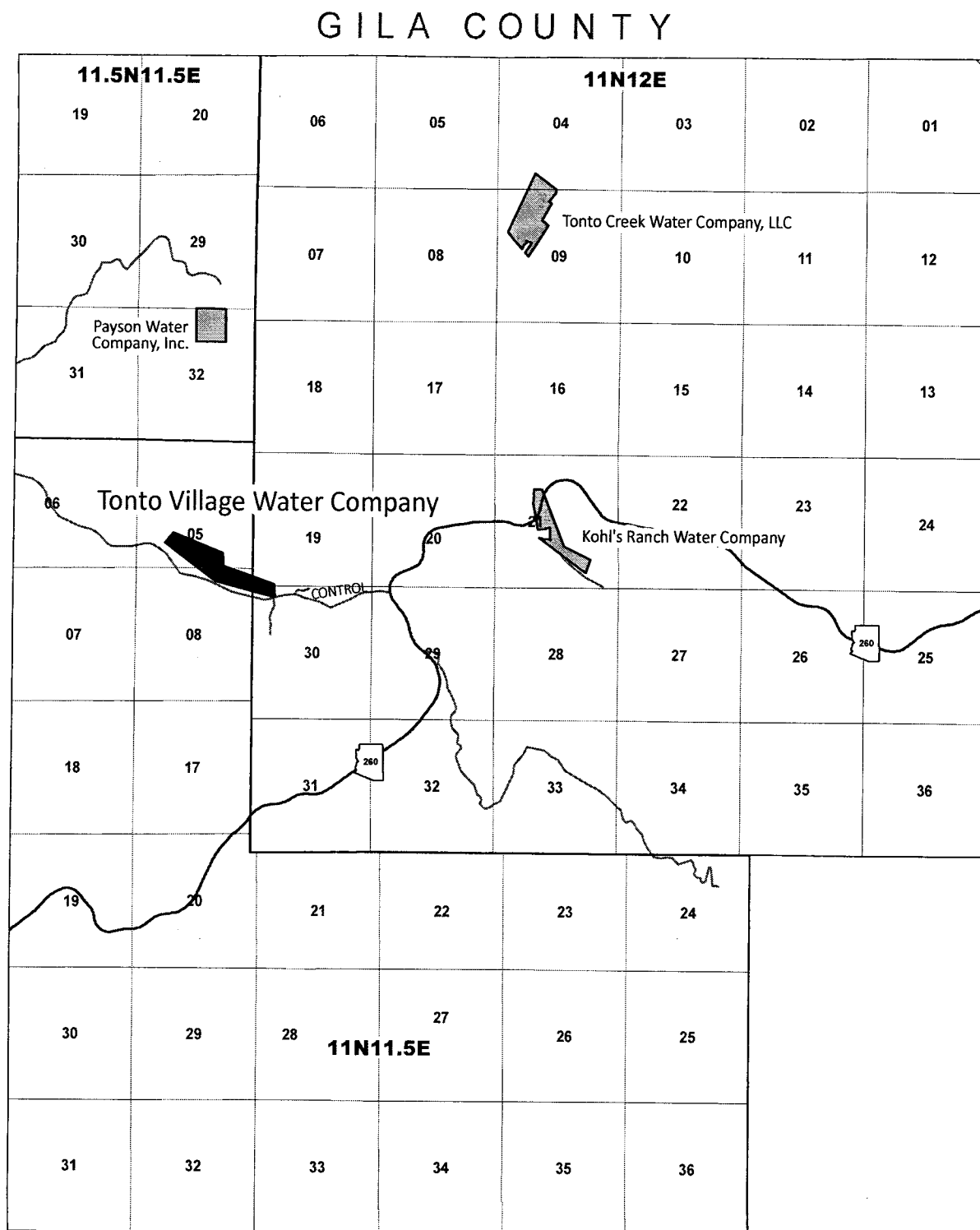


Figure 2. Certificated Area

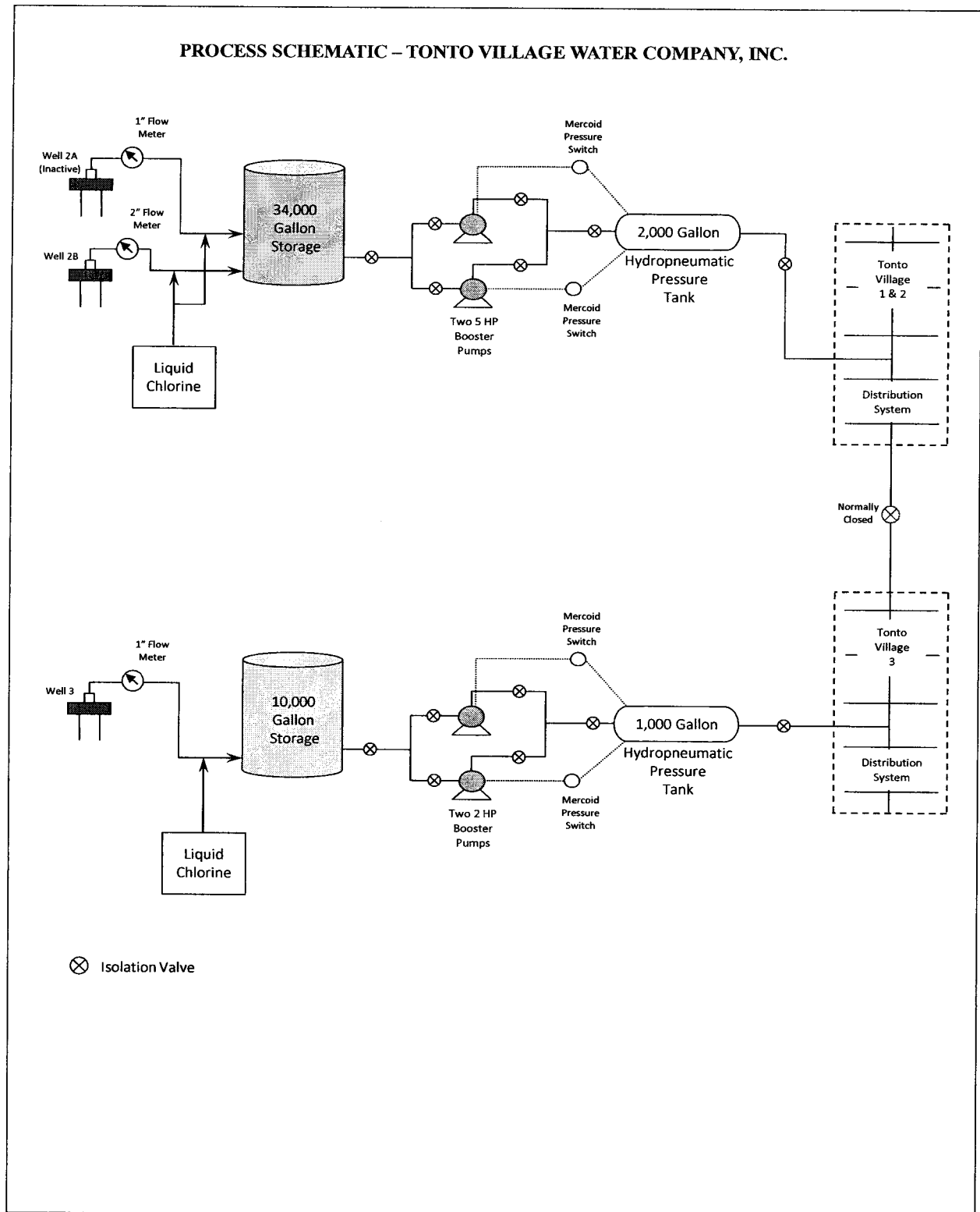


Figure 3. Water System Schematic

C. WATER USE

Water Sold

Figure 4 represents the water consumption data provided by TVWC for the test year ending December 31, 2011. Customer consumption included a high monthly water use of 171 gallons per day (“gpd”) per connection in June, and the low water use of 51 gpd per connection in November. The average daily demand during the twelve-month period was approximately 96 gpd per connection.

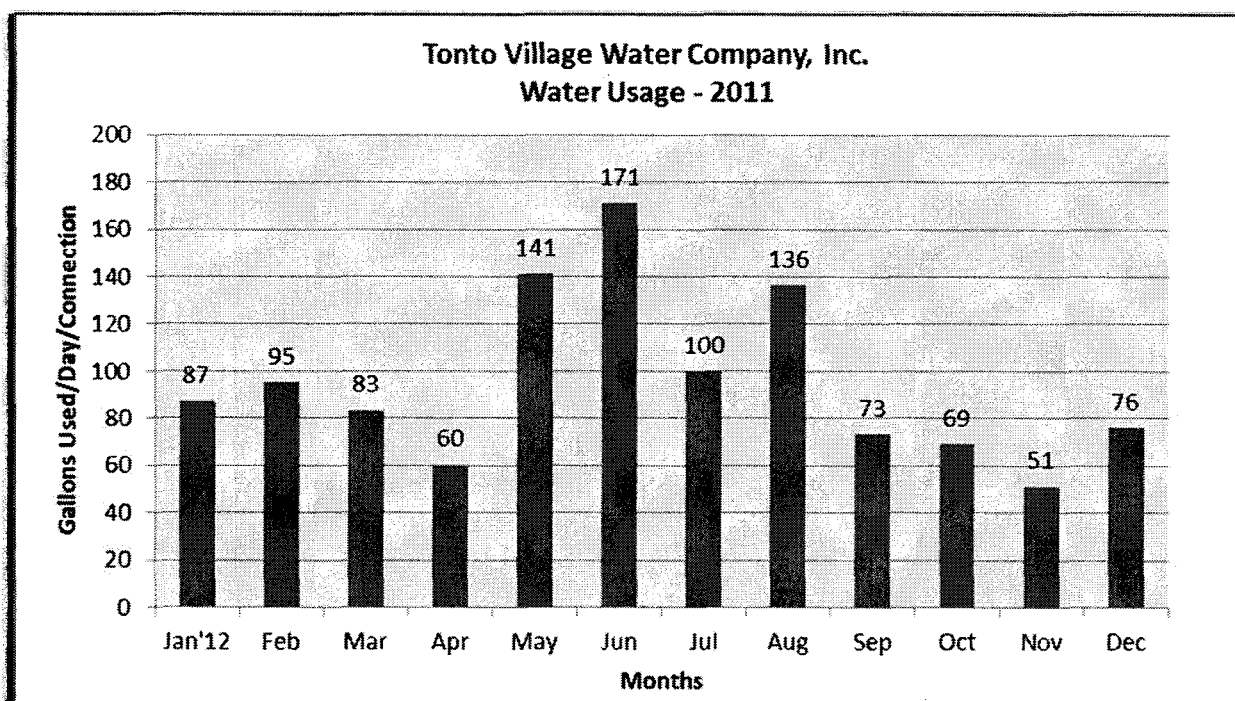


Figure 4. Water Use

Non-accounted For Water

Non-accounted for water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a company to identify water and revenue losses due to leakage, theft, and flushing. TVWC reported 6,941,000 gallons of water pumped and 6,142,000 gallons of water sold⁷, during the test year ending December, 2011, resulting in a water loss of 11.5%.

Staff recommends that TVWC continue monitoring water loss, on a monthly basis, by coordinating the reading from the well production meters and individual customer meters and

⁷ Total water sold during the test year is based on the monthly data from the meter reads.

reporting the results in its Commission Annual Reports going forward.⁸ Staff further recommends that TVWC shall prepare a water loss reduction report containing a detailed analysis and plan to reduce water loss to less than 10 percent. If TVWC believes it is not cost effective to reduce the water loss to less than 10 percent, TVWC should submit a detailed cost benefit analysis to support its opinion. In no case shall the TVWC allow water loss to be greater than 15 percent. The water loss reduction report or the detailed cost benefit analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than April 30th of the year following the excessive water loss.

System Analysis

The TVWC water system well production capacity is approximately 99 gpm when both Well #2B and Well #3 are in service. Well #2B, the only well currently in service, produces water at a rate of approximately 75 gpm (108,000 gpd). The water system has two (2) storage tanks (10,000 and 34,000 gallons) providing a total storage capacity of 44,000 gallons. There are no fire hydrants in the distribution system, and the system is not subject to a formal fire flow requirement.

During the peak month, June 2011, the water system was serving 176 customers when TVWC reported 904,000 gallons of water sold. Average daily demand for the month of June 2011 was determined to be 30,133 gpd. Staff concludes that the TVWC water system has adequate production and storage capacity to serve the current customer base and reasonable growth.

D. GROWTH

The number of metered connections served by TVWC declined between 2008 and 2009. TVWC reported 195 metered connections served in 2008 and 182 metered connections served year end 2012.⁹ TVWC currently serves 180 residential customers, a charter school, and a restaurant. The Company does not anticipate growth in its service area in the next few years.

E. ADEQ COMPLIANCE

Compliance

ADEQ regulates the TVWC water system under ADEQ Public Water System Identification ("PWS ID") No. 04-023. ADEQ inspected the water system on May 29, 2012. During the inspection no major deficiencies were found in the operation, maintenance, or certified operator status of the water system.

⁸ TVWC shall collect the data needed to accurately complete the water use data sheets contained in the Annual Report form.

⁹ Staff's historical growth figures are based on the data reported by TVWC in their annual reports submitted to the commission.

ADEQ Compliance Status Report, dated May 20, 2013, indicates that the TVWC water system has no major monitoring or reporting deficiencies, and is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

Water Testing Expense

In addition to Total Coliform, Lead & Copper, and Disinfection-By-Products testing, TVWC is also subject to mandatory participation in the Monitoring Assistance Program ("MAP").¹⁰ TVWC reported water testing expenses of \$1,786.00 (including the MAP fee) during the test year. The monitoring and testing expenses, that were reviewed, evaluated, and recalculated by Staff, are represented in Table B. Staff recommends an annual water testing expense of \$1,786 be used for purposes of this application.

Table B. Water Testing Costs

Monitoring	Cost per Test	Quantity of Tests per 3 years	Annual Testing Cost
Total Coliform	\$20	36	\$240
MAP – IOC's, Radiochemical, Nitrate, Nitrite, Asbestos, SOC's, & VOC's	MAP	MAP	\$696 (Note 1)
Lead & Copper	\$30	5 (Note 2)	\$150
Disinfection By-Products (TTHM's) (Note 3)	\$150	6 (Note 4)	\$300
Disinfection By-Products (HAA5's) (Note 3)	\$200	6 (Note 4)	\$400
Total Annual Cost	-	-	\$1,786

Notes: 1) The ADEQ MAP invoice for Calendar Year 2011 was \$695.80, 2) Assumes lead and copper testing will remain at five (5) tests triennially, 3)TTHM means Total Trihalomethanes and HAA5 means Haloacetic Acids, and 4)Assumes two (2) TTHM & two (2) HAA5 tests per year.

F. ADWR COMPLIANCE

The TVWC service area is not located within an ADWR Active Management Area ("AMA"). ADWR has determined that TVWC is currently in compliance with departmental requirements governing water providers and/or community water systems.¹¹

G. ACC COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for TVWC.¹²

¹⁰ The MAP program is mandatory for water systems, which serve less than 10,000 persons (approximately 3,300 service connections).

¹¹ Per ADWR Water Provider Compliance Status Report dated September 16, 2013.

¹² Per Compliance Section email dated August 13, 2013.

H. DEPRECIATION RATES

Staff's typical and customary depreciation rates, which vary by National Association of Regulatory Utility Commissioners ("NARUC") plant categories, are illustrated in Table C. These rates represent typical and customary values within a range of anticipated equipment life. Staff recommends that TVWC continue to use the depreciation rates presented in Table C.

Table C. Depreciation Rate Table for Water Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	---	-----

I. OTHER ISSUES

1. Service Line and Meter Installation Charges

TVWC has proposed to increase existing service line and meter installation charges.¹³ The proposed charges are refundable advances and are equivalent to the charges the Commission approved for Christopher Creek Haven ("CCHC") and Gardner Water ("GWC") Companies.¹⁴ CCHC and GWC meter and service line charges were utilized, by Staff, to develop separate service line and meter charges for TVWC. Since TVWC may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation.

Staff recommends that meter sizes 3-inches and larger be priced on an individual case basis ("ICB") at cost. Staff further recommends that the charges listed under "Staff's Recommendation" in Table D be adopted.

Table D. Service Line and Meter Installation Charges

Meter Size	Company Current Tariff	Company Proposed			Staff's Recommendation		
		Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	\$375	-	-	\$910	\$445	\$465	\$910 ¹
3/4-inch	\$425	-	-	\$1,010	\$445	\$565	\$1,010 ¹
1-inch	\$500	-	-	\$1,200	\$495	\$315	\$810
1-1/2-inch	\$675	-	-	\$1,400	\$550	\$525	\$1,075
2-inch Turbine	\$900	-	-	\$1,875	\$830	\$1,045	\$1,875
3-inch Turbine	\$1,300	-	-	\$2,715	-	-	ICB*
4-inch Turbine	\$1,800	-	-	\$4,160	-	-	ICB*
6-inch Turbine	\$N/A	-	-	\$N/A	-	-	\$N/A

Note: 1) Charge includes Sensus Touch Read Meter, and 2) * Indicates at Cost.

2. Curtailment Tariff

TVWC has an approved Curtailment Tariff on file with the Commission.

3. Backflow Prevention Tariff

TVWC has an approved Backflow Prevention Tariff on file with the Commission.

¹³ The Company's current charges were approved in Decision No. 68066, dated August 17, 2005.

¹⁴ Christopher Creek Haven and Gardner Water Companies are owned by Jeff and Dianne Daniels. The service line and meter charges were approved in Decision No. 71446, dated December 23, 2009.